

WHAT IS CLAIMED IS:

1. A substantially pure cocoa extract comprising cocoa polyphenol(s).
2. The extract of claim 1 prepared from a
5 process comprising:
reducing cocoa beans to powder,
defatting the powder, and
extracting and purifying the cocoa
polyphenol(s) from the powder.
- 10 3. The extract of claim 2 wherein the process of reducing cocoa beans to powder comprises:
freeze drying beans and pulp,
depulping the freeze dried mass,
dehulling the freeze dried cocoa beans, and
15 grinding the dehulled beans.
4. The extract of any one of claims 2 or 3 wherein the process further comprises purifying the extract by gel permeation chromatography and/or by preparative high performance liquid chromatography
20 (HPLC).
5. The extract of claim 4 containing polyphenol(s) of at least one cocoa procyanidin selected from the group consisting of: (-) epicatechin, procyanidin B-2, procyanidin oligomers 4 through 12,
25 procyanidin B-5, procyanidin A-2 and procyanidin C-1.
6. An antineoplastic composition comprising a substantially pure cocoa extract or synthetic cocoa polyphenol(s) and a suitable carrier.
7. The antineoplastic composition of claim 6
30 which is comprised of a substantially pure cocoa extract containing cocoa procyanidin(s).
8. The antineoplastic composition of claim 7 wherein the cocoa procyanidin(s) are prepared from a process comprising:
35 reducing cocoa beans to powder,
defatting the powder, and,

extracting the cocoa procyanidin(s) from the powder.

9. The antineoplastic composition of claim 8 wherein the process of reducing cocoa beans to powder comprises:

freeze drying beans and pulp,
depulping the freeze dried mass,
dehulling the freeze dried cocoa beans, and
grinding the dehulled beans.

10. The antineoplastic compositions of any one of claims 8 or 9 wherein the process further comprises purifying the extract by gel permeation chromatography and/or by preparative high performance liquid chromatography (HPLC).

11. The antineoplastic composition of claim 10 containing polyphenol(s) of at least one cocoa procyanidin selected from the group consisting of: (-) epicatechin, procyanidin B-2, procyanidin oligomers 4 through 12, procyanidin B-5, procyanidin A-2 and procyanidin C-1.

12. A method for treating a patient in need of treatment with an antineoplastic agent comprising administering to the patient an antineoplastic composition comprising an effective quantity of a substantially pure cocoa extract or synthetic cocoa polyphenol(s), and a suitable carrier.

13. The method of claim 12 wherein the antineoplastic agent is comprised of a substantially pure cocoa extract containing cocoa procyanidin(s).

14. The method of claim 13 wherein the cocoa procyanidin(s) are prepared from a process comprising:
reducing cocoa beans to powder,
defatting the powder, and,
extracting the cocoa procyanidin(s) from the powder.